

CHIRICAHUA LEOPARD FROG
(*Rana chiricahuensis*)

STATUS: Threatened (67 FR 40790, June 13, 2002) without critical habitat.

SPECIES DESCRIPTION: Distinctive pattern on the rear of the thigh consisting of small, raised, cream-colored spots or tubercles on a dark background; dorsolateral folds that are interrupted and deflected medially; stocky body proportions; relatively rough skin on the back and sides; and often green coloration on the head and back. The species also has a distinctive call consisting of a relatively long snore of 1 to 2 seconds in duration. Snout-vent lengths of adults range from approximately 54 to 139 mm (2.1 to 5.4 in). The Ramsey Canyon leopard frog (*Rana subaquavocalis*) is similar in appearance to the Chiricahua leopard frog, but it often grows to a larger size and has a distinct call that is typically given under water. Populations on the Mogollon Rim are disjunct from those in southeastern Arizona. The Rim populations may be described as a separate species.

HABITAT: The Chiricahua leopard frog is an inhabitant of cienegas, pools, livestock tanks, lakes, reservoirs, streams, and rivers at elevations of 1,000 to 2,710 m (3,281 to 8,890 ft) in central and southeastern Arizona (Santa Cruz, Apache, Gila, Pima, Cochise, Greenlee, Graham, Yavapai, Coconino, and Navajo counties, Arizona); west-central and southwestern New Mexico; and in Mexico, northern Sonora, and the Sierra Madre Occidental of Chihuahua, northern Durango and northern Sinaloa. The distribution of the Chiricahua leopard frog in Mexico is unclear.

RANGE: Current: From 1995-2000 the species was observed at 60 localities in Arizona. In New Mexico, the species was found at 41 sites from 1994 -1999; 31 of those were verified extant during 1998-1999. The species has been extirpated from about 75 percent of its historic localities in Arizona and New Mexico.

Potential: The species' potential habitat would include all historic localities, and most permanent or nearly permanent aquatic sites within its range. However, many of these sites are probably not restorable due to introduction of nonnative predators, habitat degradation, or other factors.

REASONS FOR DECLINE/VULNERABILITY: Threats to this species include predation by nonnative organisms, especially bullfrogs, fish, and crayfish; disease; drought; floods; degradation and destruction of habitat; water diversions and groundwater pumping; disruption of metapopulation dynamics (relationships between populations of frogs); increased chance of extirpation or extinction resulting from small numbers of populations and individuals; and environmental contamination.

LAND MANAGEMENT/OWNERSHIP: San Bernardino and Buenos Aires National Wildlife Refuges; Coconino, Coronado, Gila, Tonto, Apache-Sitgreaves National Forests; Bureau of Land Management; and private land.

NOTES: A special rule is proposed that would exempt take of frogs due to operation and maintenance of livestock tanks on State and private lands.

The species is still extant in all major drainages in Arizona and New Mexico where it occurred historically; however, it has not been found recently in many rivers, valleys, and mountain ranges, including the following in Arizona: White River, East Clear Creek, West Clear Creek, Silver Creek, Tonto Creek, Verde River mainstem, San Francisco River, San Carlos River, upper San Pedro River mainstem, Santa Cruz River mainstem, Aravaipa Creek, Babocomari River mainstem, Sonoita Creek, Pinaleno Mountains, Peloncillo Mountains, Sulphur Springs Valley, and Huachuca Mountains. In many of these regions Chiricahua leopard frogs were not found for a decade or more despite repeated surveys.